

IN THE CLAIMS

This listing of claims replaces all prior listings.

1-6. (Cancelled).

7. (Currently Amended) A method of manufacturing a solid-electrolyte battery comprising:

forming a first set of gel-electrolyte layers on both sides of a positive electrode collector;

forming a second set of gel-electrolyte layers on both sides of a negative electrode collector;

forming a positive electrode comprising the first set of gel-electrolyte layers on both sides of the positive electrode collector;

forming a negative electrode comprising the second set of gel-electrolyte layers on both sides of a negative electrode collector;

laminating said positive electrode and said negative electrode such that one of the first set of gel-electrolyte layers and one of the second set of gel-electrolyte layers face each other;

winding said positive electrode and said negative electrode such that another one of the first set of gel-electrolyte layers and one of the second set of gel-electrolyte layers face each other;

inserting said wound electrodes into a film pack; and

after inserting said wound electrodes into the film pack, subjecting said wound electrodes to heat treatment so that each of the first set of gel-electrode layers and the one of the second set of gel-electrolyte layers facing each other are integrated with each other into one continuous seamless layer,

wherein said gel-electrolyte layers comprise an electrolyte salt, a nonaqueous solvent and a matrix polymer, and

wherein said gel-electrolyte layers comprises LiC₄F₉SO₃.

8-9. (Cancelled).

10. (Original) The method of claim 7, wherein said wound electrodes are

subjected to heat treatment for ten minutes.

11. (Canceled).

12. (Previously presented) The method of claim 7, wherein said matrix polymer is any one of polyacrylonitrile, polyvinylidene fluoride, polytetrafluoroethylene, polyhexafluoropropylene, polyethylene oxide, polypropylene oxide, polyphosphagen, polysiloxane, polyvinyl acetate, polyvinyl alcohol, polymethyl methacrylate, polyacrylic acid, polymethacrylic acid, styrene-butadiene rubber, nitrile-butadiene rubber, polystyrene or polycarbonate.

13. (Previously Presented) The method of claim 7, wherein said nonaqueous solvent is selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate, γ -butyrolactone, γ -valerolactone, diethoxyethane, tetrahydrofuran, 2-methyltetrahydrofuran, 1, 3-dioxane, methyl acetate, methyl propionate, dimethylcarbonate, diethyl carbonate or ethylmethyl carbonate or their mixture.

14-16. (Canceled)

17. (Previously Presented) A method of manufacturing a solid-electrolyte battery comprising:

forming gel-electrolyte layers on both sides of a positive electrode and a negative electrode, wherein one of said solid-electrolyte layers formed on said positive electrode and one of said gel-electrolyte layers formed on said negative electrode face each other;

winding said positive electrode and said negative electrode after pressing;

inserting said wound electrodes into a film pack; and

after inserting said wound electrodes into the film pack, subjecting said wound electrodes to heat treatment so that said gel-electrolyte layers formed on said positive electrode and said gel-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer,

wherein said gel-electrolyte layers comprise an electrolyte salt, a nonaqueous solvent and a matrix polymer, and

wherein said gel-electrolyte layers comprises LiC₄F₉SO₃.